

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method for preventing unauthorized dynamic host configuration servers from responding to client configuration requests in an Internet Protocol (IP) network, said method comprising the steps of:

~~simulating a plurality of network clients within~~ broadcasting host configuration requests from a server checker client;

receiving configuration offer messages from one or more dynamic host configuration servers, said configuration offer messages delivered to the server checker client responsive to the broadcast host configuration requests;

~~detecting at least one an~~ detecting at least one unauthorized dynamic host configuration server within said IP network in accordance with server identification data within the configuration offer messages; and

responsive to said detecting step, delivering unicasting host configuration requests from said server checker client to said ~~at least one~~ unauthorized dynamic configuration server such that said ~~at least one~~ unauthorized dynamic host configuration server is unable to respond to configuration requests from actual network clients.

Claims 2-3. (Cancelled)

4. (Currently Amended) The method of claim 3 ~~1~~, ~~further comprising the step of flooding each of said at least one unauthorized dynamic host configuration server with said unicasting host configuration requests comprising unicasting a plurality of IP address renewal requests to said unauthorized dynamic host configuration server.~~

Claim 5. (Cancelled)

6. (Currently Amended) The method of claim 5 ~~4~~, wherein each IP address renewal request includes:

~~an unknown~~ a client medium access control (MAC) address that is not included within a range of valid MAC addresses utilized within the IP network; and

~~an IP address of said server checker client.~~

7. (Currently Amended) The method of claim 4, wherein each IP address renewal request includes ~~an unknown~~ a client IP address that is not included within a range of valid IP addresses utilized in the IP network.

8. (Currently Amended) The method of claim 1, wherein said checker client includes a server table having a list of authorized dynamic host configuration servers, and wherein said step of detecting an unauthorized dynamic host configuration server further comprises the steps of:

~~delivering an IP address request from said simulated network clients by;~~

~~broadcasting a request for an IP address to dynamic host configuration servers over said IP network~~

~~receiving one or more responses from one or more of said dynamic host configuration servers;~~

~~identifying a specific dynamic host configuration server that originated each of said responses; and~~

~~determining for each identified dynamic host configuration server whether or not said identified dynamic host configuration server is authorized referring to a table, wherein said table includes a list of authorized dynamic host configuration servers~~ comparing a server identifier included in each configuration offer message with authorized server identification data in the server table.

9. (Currently Amended) The method of claim 8, wherein said ~~step of identifying a specific dynamic host configuration server that originated a response~~ comparing a server identifier included in each configuration offer message with authorized server identification data in the server table further comprises the step of retrieving from each response an IP address from each configuration offer message of the dynamic host configuration server that originated the response.

10. (Currently Amended) The method of claim 8, wherein said server table includes an IP address for each authorized dynamic host configuration server.

Claims 11-13. (Cancelled)

14. (Currently Amended) A system for preventing unauthorized dynamic host configuration servers from responding to client configuration requests in an Internet Protocol (IP) network, said system comprising:

processing means for ~~simulating a plurality of network clients within~~ broadcasting host configuration requests from a server checker client;

processing means for receiving configuration offer messages from one or more dynamic host configuration servers, said configuration offer messages delivered to the server checker client responsive to the broadcast host configuration requests;

processing means for detecting ~~at least one an~~ unauthorized dynamic host configuration server within said IP network in accordance with server identification data within the configuration offer messages; and

processing means, responsive to detecting an unauthorized dynamic host configuration server, for delivering unicasting host configuration requests from said server checker client to said ~~at least one~~ unauthorized dynamic configuration server such that said ~~at least one~~ unauthorized dynamic host configuration server is unable to respond to configuration requests from ~~actual~~ network clients.

Claims 15-16. (Cancelled)

17. (Currently Amended) The system of claim ~~16~~ 14, ~~further comprising processing means for flooding each of said at least one unauthorized dynamic host configuration server with said~~ processing means for unicasting host configuration requests comprising processing means for unicasting a plurality of IP address renewal requests to said unauthorized dynamic host configuration server.

Claim 18. (Cancelled)

19. (Currently Amended) The system of claim ~~18~~ 17, wherein each IP address renewal request includes:

~~an unknown~~ a client medium access control (MAC) address that is not included within a range of valid MAC addresses utilized within the IP network; and  
~~an IP address of said server checker client.~~

20. (Currently Amended) The system of claim 17, wherein each IP address renewal request includes ~~an unknown~~ a client IP address that is not included within a range of valid IP addresses utilized in the IP network.

21. (Currently Amended) The system of claim 14, wherein said checker client includes a server table having a list of authorized dynamic host configuration servers, and wherein said processing means for detecting an unauthorized dynamic host configuration server further comprises[[:] ]

~~processing means for delivering an IP address request from said simulated network clients by;~~

~~processing means for broadcasting a request for an IP address to dynamic host configuration servers over said IP network;~~

~~processing means for receiving one or more responses from one or more of said dynamic host configuration servers;~~

~~processing means for identifying a specific dynamic host configuration server that originated each of said responses; and~~

~~processing means for determining for each identified dynamic host configuration server whether or not said identified dynamic host configuration server is authorized referring to a table, wherein said table includes a list of authorized dynamic host configuration servers comparing a server identifier included in each configuration offer message with authorized server identification data in the server table.~~

22. (Currently Amended) The system of claim 21, wherein said processing means for ~~identifying a specific dynamic host configuration server that originated a response~~ comparing a

server identifier included in each configuration offer message with authorized server identification data in the server table further comprises processing means for retrieving from each response an IP address from each configuration offer message of the dynamic host configuration server that originated the response.

23. (Currently Amended) The system of claim 21, wherein said server table includes an IP address for each authorized dynamic host configuration server.

Claims 24-26. (Cancelled)

27. (Currently Amended) A program product for preventing unauthorized dynamic host configuration servers from responding to client configuration requests in an Internet Protocol (IP) network, said program product comprising:

instruction means for ~~simulating a plurality of network clients within~~ broadcasting host configuration requests from a server checker client;

instruction means for processing configuration offer messages received from one or more dynamic host configuration servers, said configuration offer messages delivered to the server checker client responsive to the broadcast host configuration requests;

instruction means for detecting ~~at least one~~ an unauthorized dynamic host configuration server within said IP network in accordance with server identification data within the configuration offer messages; and

instruction means, responsive to said detecting, for delivering unicasting host configuration requests from said server checker client to said ~~at least one~~ unauthorized dynamic configuration server such that said ~~at least one~~ unauthorized dynamic host configuration server is unable to respond to configuration requests from actual network clients.

Claims 28-29. (Cancelled)

30. (Currently Amended) The program product of claim 29 27, ~~further comprising instruction means for flooding each of said at least one unauthorized dynamic host configuration~~

~~server with said instruction means for unicasting host configuration requests comprising instruction means for unicasting a plurality of IP address renewal requests.~~

Claim 31. (Cancelled)

32. (Currently Amended) The program product of claim ~~31~~ 30, wherein each IP address renewal request includes:

~~an unknown a client medium access control (MAC) address that is not included within a range of valid MAC addresses utilized within the IP network; and~~

~~an IP address of said server checker client.~~

33. (Currently Amended) The program product of claim 30, wherein each IP address renewal request includes ~~an unknown a client IP address that is not included within a range of valid IP addressed utilized in the IP network.~~

34. (Currently Amended) The program product of claim 27, wherein said checker client includes a server table having a list of authorized dynamic host configuration servers, and wherein said instruction means for detecting an unauthorized dynamic host configuration server further comprises:

~~instruction means for delivering an IP address request from said simulated network clients by:~~

~~instruction means for broadcasting a request for an IP address to dynamic host configuration servers over said IP network;~~

~~instruction means for receiving one or more responses from one or more of said dynamic host configuration servers;~~

~~instruction means for identifying a specific dynamic host configuration server that originated each of said responses; and~~

~~instruction means for determining for each identified dynamic host configuration server whether or not said identified dynamic host configuration server is authorized referring to a table, wherein said table includes a list of authorized dynamic host configuration servers~~

comparing a server identifier included in each configuration offer message with authorized server identification data in the server table.

35. (Currently Amended) The program product of claim 34, wherein said instruction means for ~~identifying a specific dynamic host configuration server that originated a response~~ comparing a server identifier included in each configuration offer message with authorized server identification data in the server table further comprises instruction means for retrieving from ~~each response~~ an IP address from each configuration offer message of the ~~dynamic host configuration server that originated the response.~~

36. (Currently Amended) The program product of claim 34, wherein said server table includes an IP address for each authorized dynamic host configuration server.

Claims 37-39. (Cancelled)